WESTERN RESOURCE
ADVOCATES

September 9, 2013

Via E-mail

Jeff Tannler
Statewide AMA Director
Arizona Department of Water Resources
3550 N. Central Avenue
Phoenix, AZ 85012

Dear Jeff,

Western Resource Advocates (WRA) offers the following comments on the Prescott AMA Fourth Management Plan Draft Working Copy. WRA is a non-profit environmental law and policy organization that works to protect the West's land, air and water. Our Arizona water program promotes water management policies that lessen impacts to rivers both statewide and in the Verde River and San Pedro River watersheds. These efforts include support for water conservation, reuse and planning actions to reduce groundwater pumping. We appreciate the continuing opportunity to comment during the Plan development process and the willingness of the Department to consider and incorporate public comments and proposals into the Draft Working Copy.

General Comments

The Department has clearly identified the seriousness of the safe-yield challenges facing the AMA, largely due to the number of pre-declaration platted lots and the groundwater allowance for newer lots and designations that has resulted in groundwater being "close to being fully allocated" and offers thoughtful, specific and innovative solutions to address them that have not been presented in previous management plans. However, the key issue of Assured Water Supply allowable pumping that will continue to deplete the aquifer is not directly addressed.

The Department mentions the limits of its authority and the importance of individual, city, county and regional efforts. We encourage the Department to be a catalyst and provide assistance for implementation of meaningful local actions to reduce the AMA overdraft, including addressing allowable pumping. This will involve regional cooperation, planning and management.

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Water Budget

Portraying annual overdraft as a 5-year running average that illustrates the variability of annual recharge, amount of overdraft and the lag time between rainfall events and aquifer impact is informative. This is useful as a tool to plan for variability and management of pumping and recharge to address localized aquifer conditions affected by drought, e.g. adoption of seasonal/annual pumping regimes to shift pumping locations as mentioned in Chapter 12. A responsive pumping regime could also reduce impact to habitat by maintaining baseflow to springs and streams. The Department could facilitate and provide technical support to incorporate this data into local water management strategies. However, the long term net natural recharge and overdraft is also of value for planning and supply development purposes and should also be reflected in the management plan budgets.

Municipal Conservation

We are encouraged by the statement that the municipal conservation program "continues to encourage the equitable distribution of water in an environmentally and economically sound manner" through various mechanisms such as cooperative regional efforts and regulatory programs. We are interested in understanding the environmental aspects related to the municipal conservation program envisioned by the Department. We also appreciate that the Plan identifies conservation as one of the management solutions but noted that a number of statements and proposed regulations appear to downplay its contribution. For example, conservation is repeatedly mentioned as not being the only solution to reach safe-yield when it is clear that no single strategy is sufficient and that a combination of approaches are needed. Conservation is usually a good starting place since it is typically the quickest, cheapest and least political solution.

We support the suggestion that WaterSense codes for new subdivisions be adopted and incorporation of WaterSense savings for new development into Scenarios B and C. Sewer flow and wastewater treatment system problems due to low interior demand are mentioned on page 12-9 but this does not appear to be a widespread problem. We refer you to an Alliance for Water Efficiency Fact sheet[1] on this topic.

Our primary concerns about the municipal conservation program are listed below.

1) Lack of acknowledgement of conservation savings from existing users

AMA–wide conservation programs that include all communities, non-residential users and exempt well users can result in additional demand reductions if there is sufficient funding, commitment and promotion of certain programs. These include programs that replace inefficient plumbing fixtures in both residential and non-residential buildings and

[1] http://www.allianceforwaterefficiency.org/uploadedFiles/Resource_Center/Library/residential/toilets/AWE-Drainline-Article-July-2011.pdf

installation of rain water harvesting systems to replace potable/pumped water for outdoor use.

Prescott has been recognized for its conservation efforts, which together with normal replacement of aging fixtures have already resulted in demand reduction. However, additional savings are possible. For example, retrofitting older homes with high efficiency fixtures can reduce indoor use (including leaks) by as much as 40%. Toilet replacement water savings alone are conservatively estimated at 0.6 acre-feet per household over the life of a toilet –equivalent to 600 acre-feet/1000 homes retrofitted at a typical cost of $250 to $325 per acre-foot, much less expensive than any of the pipeline estimate costs in the CYHWRMS study.

Even "newer" communities like Prescott Valley have a significant amount of pre-federal plumbing code housing. Housing age data indicate that approximately 5,400 homes (37%) in Prescott Valley and 11,700 homes (62%) in Prescott are pre-code representing an opportunity for significant water savings. We encourage incorporation of demand reduction by existing users into at least one of the Scenarios and into regulatory target setting discussed below.

2) A NPCCP that does not necessarily result in meaningful demand reduction

The NPCCP program lacks readily measurable program standards. We encourage the Department to continue to develop meaningful benchmarks of program effectiveness and to periodically review the program with the assistance of an independent researcher. We encourage consideration of additional, mandatory BMPs, tailored to individual providers, that have measurable water savings rather than the current focus on education and awareness. While information/education programs are important to an overall conservation program strategy, they do not result in measureable water savings.

3) A GPCD target methodology that does not promote conservation

The Department has a long history of thoughtfully considering achievable demand reductions when setting regulatory conservation targets. We fail to understand how setting a conservation target at one standard deviation from a historic median per capita rate encourages conservation or takes into account a water provider's conservation potential. We appreciate the desire to simplify the Total GPCD program but strongly encourage the Department to consider a meaningful approach that results in reasonable per capita reductions. For example, the current proposal sets the City of Prescott's total GPCD requirement at 172 while its current rate is approximately 130 GPCD. We believe that Prescott is committed to continuing its conservation efforts. However, under this approach there would be no regulatory incentive for a provider to conserve or to apply to be in the NPCCP if it could be regulated under a program that allowed a huge GPCD increase. We believe this sends a message that conservation is not important.

Water Management Assistance Fund

It is anticipated that the Water Management Assistance fund will have $125,000 available during the 4MP. We encourage allocation of this money to conservation assistance programs that measurably reduces groundwater pumping and augmentation rather than for research.

Exempt Wells

The Plan identifies exempt well pumping as a water management issue and the need for additional data on exempt well demand. While the Department lacks authority to regulate these wells, we support the extension of conservation efforts to these users, ideally targeted to those with the greatest potential to conserve that are located in hydrologically sensitive areas.

WRA investigated domestic wells in the Sierra Vista subwatershed using a methodology described in its report "Estimated Water Demand and Conservation Potential of Domestic Wells in the Sierra Vista Subwatershed, Arizona" (May 2012)[2]. The methodology has since been refined to provide a better demand estimate and associated conservation potential and is transferable to the Prescott AMA. WRA is available to discuss this approach with the Department and the Prescott GUAC if there is interest in better characterizing domestic well use and a follow on conservation effort.

Reclaimed Water Use

Reclaimed water is a valuable water supply to the AMA and we agree with the Department that more thoughtful planning to maximize its benefit is needed including recharge where it has most benefit to the AMA aquifer (e.g. along Granite Creek) with recovery in the same area, connecting more homes to a centralized sewer system, including exempt wells, and removing effluent use incentives that allow higher application rates (e.g. on golf courses). In addition, development of a regional storage and recovery plan should be supported by the Department to encourage strategic recharge and recovery.

Augmentation

All three safe-yield scenarios presented in the Plan include importation of Big Chino groundwater as an essential supply to address overdraft although studies show that importation will reduce flow in the Verde River. The current agreement is to conduct modeling and monitoring will likely lead to a mitigation agreement to address pumping impacts on the River. We recommend that the Plan address mitigation strategies that include options that reduce the volume of imported water needed.

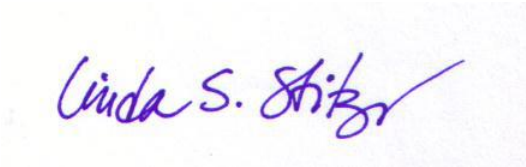
Any "paper water" exchanges, such as pursuing a CAP subcontract in exchange from more local water diversions, are unlikely to result in local aquifer benefit. In addition, the

[2] http://www.westernresourceadvocates.org/water/SVS_domestic_well_conservation_June.pdf

costs associated with the supply, it's low priority status and competition will limit its viability as an augmentation strategy for the AMA.

Lot-scale and neighborhood rainwater/stormwater harvesting should be incentivized or included as a regulatory option. Passive and active (storage) systems have many benefits including replacement of potable water for irrigation with non-potable supplies and enhancing infiltration and recharge. Larger-scale capture could result in meaningful aquifer replenishment but must be carefully evaluated for environmental and water resource implications. Augmentation actions should not lead to a groundwater pumping credit program until, at a minimum, the aquifer is in long-term surplus.

Thank you for considering these and our previous comments and your efforts on the Prescott 4MP. Please let me know if you have any questions or would like additional information related to these comments.



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